

ABSTRACT OF THE DISCLOSURE

A method for polishing a metal layer (e.g. copper) on a workpiece is provided wherein relative motion is produced between the metal layer and a polishing surface and wherein the metal layer has a polish resistant film thereon. The metal layer is first pre-treated to substantially remove the polish resistant film. Next, the metal layer is polished at low pressure between the metal layer and the polishing surface in the presence of a polishing solution. The pretreating may be accomplished by, for example, sputtering, polishing the polish-resistant film in the presence of abrasive polishing solution, polishing the polish-resistant film at higher pressures between the film and the polishing surface and/or maintaining the temperature of the pretreating step to be substantially between 10 degrees Centigrade and 30 degrees Centigrade.